

ThinkPad P52 Platform Specifications

Product Specifications Reference (PSREF)

Processor	8th Generation Intel® Core™ i7 / i9 Processor or Intel Xeon® E Processor								Dimensions	<i>WxDxH:</i> 14.86" x 9.93" x 0.96-1.16"; 377.4mm x 252.3mm x 24.5-29.4mm <i>WxDxH(Touch):</i> 14.86" x 9.93" x 1.02-1.21"; 377.4mm x 252.3mm x 25.8-30.7mm			
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Types	Processor Graphics	Weight	<i>Non-touch model:</i> starting at 5.4 lb / 2.45kg; <i>Multi-touch model:</i> starting at 6.4 lb / 2.9kg			
	i7-8750H	6	12	2.2 GHz	4.1 GHz	9MB	DDR4-2400	Intel UHD Graphics 630	Case color Case material	Black			
	i7-8850H			2.6 GHz	4.3 GHz	9MB				Display cover: Glass-Fiber Reinforced Plastic; Bottom: Magnesium/Aluminum			
	i9-8950HK			2.9 GHz	4.8 GHz	12MB		Intel UHD Graphics P630					
	E-2176M			2.7 GHz	4.4 GHz	12MB							
Graphics	Intel UHD Graphics 630 or P630 in processor and NVIDIA Quadro® P1000 (4GB memory), P2000 (4GB memory), or P3200 (6GB memory, VR ready); supports external digital monitor via HDMI, Mini DisplayPort, or Thunderbolt™; Up to 4 displays with 3 external monitors plus system LCD screen. Max resolution: 3840X2160@60Hz (DisplayPort via Mini DisplayPort cable); 5120X2880@30Hz (Thunderbolt); 4096x2160@60Hz (HDMI)								Smart card reader ExpressCard Media reader Ports	Optional: Smart card reader None 4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card Three USB 3.1 Gen 1 (one Always On), two USB Type-C / Thunderbolt 3 (with the function of Power Delivery and DP), Mini DisplayPort 1.4, HDMI 2.0, Ethernet (RJ-45), nano-SIM card slot (WWAN models), headphone / microphone combo jack, optional smart card reader, 4-in-1 reader (MMC, SD, SDHC, SDXC), security keyhole			
Chipset	Mobile Intel CM246 Chipset								Camera (optional)	<i>* Power Delivery only supports power-out for charging peripherals</i> <i>* Depending on many factors, actual data transfer speed may be lower than theoretical speed</i>			
Memory	128GB non-ECC or 64GB ECC max / 2400MHz DDR4 (ECC function supported only on Xeon processor), dual-channel capable, four DDR4 SO-DIMM sockets <i>* Installed DIMMs are actually 2666MHz but run at 2400MHz due to Intel limitation</i> <i>* 128GB non-ECC memory for special bid only</i>								Audio support	One of the following, configurable by model: <ul style="list-style-type: none">• HD720p camera with ThinkShutter camera privacy, fixed focus• IR camera and HD720p camera, fixed focus HD Audio, Realtek® ALC3286 codec / stereo speakers, 2W x 2, Dolby® Audio™ Premium / optional dual array microphone, headphone / microphone combo jack, Dolby Atmos® headphone			
Display	<i>Some:</i> 15.6" (396mm) FHD (1920x1080), anti-glare, LED backlight, WVA, 300 nits, 16:9 aspect ratio, 700:1 contrast ratio, 72% gamut, 160° viewing angle <i>Some:</i> 15.6" (396mm) UHD (3840x2160), anti-glare, LED backlight, WVA, 400 nits, 16:9 aspect ratio, 1000:1 contrast ratio, 100% gamut, 170° viewing angle, multi-touch								Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, numeric keypad, LED backlight 3-button TrackPoint® pointing device and 3-button Mylar surface multi-touch touchpad			
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture (4K only)								Security	Power-on password, hard disk password, supervisor password, security keyhole			
Pen	Supports pen accessory, please see the accessory compatibility for details								Security chip	Discrete TPM 2.0, TCG Certified			
Storage	<i>Up to 3 drives (two M.2 SSD and one HDD), supports single sided M.2 2280 drives only</i> <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>Some:</i> M.2 SSD / PCIe NVMe, PCIe 3.0 x 4, 32Gb/s								vPro (optional)	Intel vPro Technology			
Optane™ memory	<i>Optional:</i> Intel Optane memory, PCIe NVMe, PCIe 3.0 x 2								Fingerprint reader	Touch style match on chip fingerprint reader on the palm rest			
RAID (optional)	RAID 0/1 support								Color calibration	None			
Optical	None								NFC (optional)	Near Field Communication			
Ethernet	<i>Non-vPro model:</i> Intel Ethernet Connection I219-V (Jacksonville) <i>vPro model:</i> Intel Ethernet Connection I219-LM (Jacksonville)								Battery	Swappable Li-ion 90Wh battery			
WLAN	Intel Wireless-AC 9560, Wi-Fi 2x2 802.11ac + Bluetooth 5.0, M.2 card								Max battery life (MobileMark® 2014)	<i>Discrete mode:</i> 6.1 hr; <i>Hybrid mode:</i> 8.9 hr <i>* Battery life varies significantly with hardware configurations, settings, usage, & other factors</i>			
Bluetooth™	Bluetooth 5.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								AC adapter	170W slim tip AC adapter			
WWAN (optional)	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none">• Wireless WAN upgradable• Integrated Mobile Broadband 4G LTE-A, Intel XMM™ 7360 (Fibocom L850-GL), M.2 card								Operating system	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none">• Windows® 10 Home 64• Windows 10 Pro 64• Windows 10 Pro 64 for Workstations			
SIM card (opt)	Nano-SIM card slot, optional Verizon LTE (US) SIM card								Limited warranty (optional)	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none">• 1-year depot repair service• 3-year/1-yr battery depot repair service• 3-year/1-yr battery limited onsite service			
Mil-Spec test	MIL-STD-810G military testing								Environment	EPEAT™ Silver; ENERGY STAR® 6.1; RoHS-compliant			

Note: The specifications above may not be available in all regions.

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